

## Psychopharmacology for the Clinician

*The information in this column is not intended as a definitive treatment strategy but as a suggested approach for clinicians treating patients with similar histories. Individual cases may vary and should be evaluated carefully before treatment is provided.*

### Autism spectrum disorders, schizophrenia and diagnostic confusion

A 34-year-old man with a diagnosis of schizophrenia is referred for an autism spectrum disorder assessment. He was diagnosed with schizophrenia at age 24 on the basis of persecutory ideation, and he has been taking an atypical antipsychotic since then. He is a high achiever and graduated with a Bachelor's degree, but as an adult, he has been unable to secure employment and has remained isolated with no known social contacts. Developmental information from his parents, with whom he lives, indicates that he has never formed friendships or relationships and has preferred to follow a fairly solitary existence. Further information about his persecutory symptoms indicates that he has always been a rigid thinker and held beliefs with total conviction, and he has been sensitive to comments made by others. The diagnosis of schizophrenia was based on the presence of these persecutory symptoms in association with negative symptoms, including flat affect and poor motivation. However, more detailed developmental information about his formative years is consistent with a diagnosis of autism spectrum disorder.

A significant number of adults may have an undiagnosed autism spectrum disorder. Some of these will have been managed in mental health services and treated for a psychotic disorder, usually on the evidence of delusional thinking on a background of "negative symptoms." Although it is reasonable to believe that a number of these people may indeed have schizotypal disorder (i.e., a disorder nosologically related to schizophrenia), some probably have an autism spectrum disorder without comorbidity and may have therefore been misdiagnosed with schizophrenia.

It is true to say that, at a phenomenologic level, there is considerable overlap between autism spectrum disorders and schizoid type personalities. Some recent genetic studies indicate that this overlap may represent shared genetic mechanisms. Antipsychotic medication is unlikely to have an impact on the thought patterns that are characteristic of autism spectrum disorders, and people with these disorders seem to be very sensitive to the side effects of all psychotropic medications. Thus, making a distinction is important to avoid the unnecessary use of medication and to fully appreciate the prognosis, which is more likely to be positively impacted by social skills interventions. Moreover, in the absence of a treatment response, it is not unusual for people with autism spectrum disorder to be taking high doses of antipsychotics or a combination of several antipsychotics.

Diagnostic clarity about the presentation and characteristics of autism spectrum disorders in adults has improved in recent years, particularly for higher functioning individuals, such as those described as having Asperger Syndrome. The core characteristics of this disorder include lifelong impairments in social interaction and communication and a tendency for routine and ritualistic patterns of behaviour, including the pursuit of circumscribed patterns of interest. Although these features also characterize schizoid and schizotypal personalities, differentiating from these can usually be achieved by obtaining a developmental history: people with autism spectrum disorder have an onset of the full clinical picture before 3 years of age, whereas those with schizoid or schizotypal personality disorder have relatively typical development as children but become symptomatic as adolescents. In addition, unlike those with

schizoid and schizotypal disorders, people with autism spectrum disorders are not necessarily aloof, but instead may be socially motivated but clumsy, naive and inappropriate in their attempts to engage with others.

Although the beliefs among people with autism spectrum disorders may sometimes appear persecutory and thereby lead to an assumption of psychosis, the origin of such beliefs is likely due to a lack of "theory of mind." Without this theory, it is difficult to determine irony and sarcasm and to understand the motivation behind other people's behaviours. This, coupled with an inherent difficulty decoding nonverbal communicative information, may lead to misinterpretations and misunderstandings that may present as beliefs of a paranoid nature. Although comorbidity is a possibility in autism spectrum disorders, the prevalence of schizophrenia has been consistently shown to be low.

Following re-evaluation, our patient was diagnosed with an autism spectrum disorder and slowly weaned off antipsychotic medication without any problems. He was put in touch with an autism spectrum disorder support group, and through a service for adults with autism spectrum disorder, he was able to engage in supervised employment.

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*Psychopharmacology for the Clinician columns are usually based on a case report that illustrates a point of interest in clinical psychopharmacology. They are about 500–650 words long and do not include references. Columns can include a bibliography which will be available only at the journal website and can be accessed through a link at the bottom of the column.*

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